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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,539	09/30/2003	Rongzhen Yang	42P11895C	7664

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EXAMINER	
MAI, TAN V	

ART UNIT	PAPER NUMBER
2193	

MAIL DATE	DELIVERY MODE
03/10/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/676,539	YANG, RONGZHEN	
	Examiner	Art Unit	
	Tan V. Mai	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,6,7,9,10,17,18,20,22,23 and 25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,6,7,9,10,17,18,20,22,23 and 25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/30/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-2, 4, 6, 17-18, 20, 22-23 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per independent claim 1, there is NO relation between "receiving" step and other steps. Similarly noted independent claims 17 & 23.

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-2, 4, 6-7 and 9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims recite a method for performing a mathematical function.

In order for a process claim to be considered statutory, the process claim **must first** be either 1) structurally tied to another statutory class (such as a **particular** apparatus) or 2) transform underlying subject matter to a different state or thing (*In re Bilski*). Claim 1 detail steps of generating a sequence of values. None of the cited steps are structurally tied to another statutory class (such as a particular apparatus). The dependent claims add nothing to solve this problem and therefore are non-statutory also. Claim 7 and its dependent claim are rejected under the similar logic as applied above based on their limitations.

In addition, claims 1-2, 4, 6-7 and 9 all detail limitations that are directed toward a mathematical algorithm and not a practical application of that algorithm. Thus, while the claimed invention may useful and concrete, it fails produce a tangible result.

In sum, claims 1-2, 4, 6-7 and 9 are not directed to a tangible result nor do they transform an article or physical object. The claimed "delivering" do not transform an article or physical object to a different state or thing. The claims also do not present a tangible result of a practical application but does provide a useful and concrete result.

Therefore, claims 1-2, 4, 6-7 and 9 are directed to non-statutory subject matter.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2, 4, 6-7, 9-10, 17-18, 20, 22-23 and 25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,725,246. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scopes of the inventions are the same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-2, 4, 17-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinsen et al (US Pat. 4,158,285).

As per independent claim 1, Heinsen et al disclose an electronic wristwatch substantially as claimed, including: "receiving" step, i.e., data entry (e.g., hours, minutes or seconds in either decimal notation or colons, see col. 2, first complete paragraph and col. 34, second paragraph); "determining" step, i.e., arrangement proper format display (e.g., see result in table in col. 6); and "generating" step, i.e., a result is different from data entry. It is noted that Heinsen et al do not specifically detail the claimed "radix for each value of the second sequence varying over the second sequence in relation to an application" feature; Heinsen et al do disclose "mixed-radix numeration system" feature as stated in applicant's specification, e.g., see paragraph [0004]. Therefore, "radix for each value of the second sequence varying over the second sequence ..." and Heinsen et al's "mixed-radix numeration system" are the same. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to Heinsen et al's teachings because the device generates a sequence of values in "mix-radix numeration system" as claimed.

As per claim 2, the "data entry" of Heinsen et al should be in binary sequence in the process.

As per claim 4, Heinsen et al do show the claimed feature, i.e., proper format of hour/minute/second or day/month/year.

Due to the similarity of claims 17-18 and 20 to claims 1-2 and 4, they are rejected under a similar rationale.

6. Claims 6, 10, 22-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinsen et al (US Pat. 4,158,285) in view of Yuen et al (applicant's admission Prior Art, US Pat. 5,307,173).

Heinsen et al have been discussed in paragraph No. 5 above.

As per claim 6, the claim adds the "converting the decimal value into a binary sequence" steps to "reconstructing" step. These features are old and well known in the art. For example, see Yuen et al's Fig. 7, steps (150,154 and 156). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Yuen et al's steps in Heinsen et al, thereby making the claimed invention, because the proposed device is capable of transmitting / reconstructing sequence as claimed.

As per independent claim 10, due to the similarity of claim 10 to claim 6, it is rejected under a similar rationale.

As per claim 22, due to the similarity of claim 22 to claim 6, it is rejected under a similar rationale.

Due to the similarity of claims 23 and 25 to claims 1 and 6, they are rejected under a similar rationale

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726. The examiner can normally be reached on Mon-Wed from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock, can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is:

Official (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

/Tan V Mai/
Primary Examiner, Art Unit 2193